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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,243	05/28/2002	Maria Athelougou	3400P012	6329

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Blakely, Sokoloff Taylor & Zafman
12400 Wilshire Blvd 7th Floor
Los Angeles, CA 90025-1026

EXAMINER

TRAN, MAI T

ART UNIT PAPER NUMBER

2129

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/031,243		ATHELOGOU ET AL.	
	Examiner		Art Unit	
	Mai T. Tran		2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

REMARKS

Applicants' amendment dated October 4, 2005 responding to the May 4, 2005 Office Action provided in the rejection of claims 1-6 and the objection to claims 7-19, wherein claims 1-19 have been amended and claim 20 is newly added. Claims 1-20 remain pending in the application and which have been fully considered by the examiner.

Applicants' amendment on page 7 regarding the change to the specification at the paragraph bridging pages 4 and 5 has not been entered due to the incorrect information listed. The U.S. Patent Application Number corresponding to the German Patent Application DE 199 08 204.9 should be 09/806727 and not 10/806727. The Examiner withdraws the objection to claims 1-6 for the minor informalities, the objection to claims 7-19 for multiple dependency corresponding to Applicants' amendment.

PRIORITY

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

SPECIFICATION

The specification is objected to because of the following:

The specification does not contain any section headings. The guideline for contents and arrangement of the specification is provided below. A substitute specification complying with the guideline is suggested.

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and

problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the

World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

It is also noted that specific claim number, such as claim 1, is referred to in the specification on page 1, line 2, on page 3, line 13, line 24, line 26. This is a non-exhaustive list. Applicants' cooperation is required in correcting any errors of which applicants may become aware of the specification. Applicants should not refer to specific claim numbers in the specification due to the potential renumbering of claims during prosecution by applicants and at the time of allowance by the Office.

CLAIM REJECTIONS - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The invention as disclosed in claims **1-20** is directed to non-statutory subject matter.

2. Claims **1-20** are not claimed to be practiced on a computer nor are they store in a computer readable medium. On that basis alone, they are clearly non-statutory.
3. Regardless of whether any of the claims are claimed to be practiced on a computer, none of them is limited to practical applications in the technological arts. Examiner finds that *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) controls the 35 U.S.C. § 101 issues on that point for reasons made clear by the Federal Circuit in *AT&T*

Corp. v. Excel Communications, Inc., 50 USPQ2d 1447 (Fed. Cir. 1999). Specially, the Federal Circuit held that the act of:

...[T]aking several abstract ideas and manipulating them together adds nothing to the basic equation. *AT&T v. Excel* at 1453 quoting *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

Examiner finds that Applicants' "semantic network" references are just such abstract ideas.

4. Examiner bases his position upon guidance provided by the Federal Circuit in *In re Warmerdam*, as interpreted by *AT&T v. Excel*. This set of precedents is within the same line of cases as the *Alappat-State Street Bank* decisions and is in complete agreement with those decisions. *Warmerdam* is consistent with *State Street*'s holding that:

Today we hold that *the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price*, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result' -- *a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.* (emphasis added) *State Street Bank* at 1601.

5. True enough, that case later eliminated the "business method exception" in order to show that business methods were not per se nonstatutory, but the court clearly *did not* go so far as to make business methods *per se* statutory. A plain reading of the excerpt above shows that the Court was *very specific* in its definition of the new *practical application*. It would have been much easier for the court to say that "business methods were per se statutory" than it was to define the practical application in the case as "...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price..."
6. The court was being very specific.

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7. Additionally, the court was also careful to specify that the “useful, concrete and tangible result” it found was “a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.” (i.e. the trading activity is the further practical use of the real world monetary data beyond the transformation in the computer – i.e., “post-processing activity”).
8. Applicants cite no such specific results to define a useful, concrete and tangible result. Neither do Applicants specify the associated practical application with the kind of specificity the Federal Circuit used.
9. Furthermore, in the case *In re Warmerdam*, the Federal Circuit held that:

...[T]he dispositive issue for assessing compliance with Section 101 in this case is whether the claim is for a process that goes beyond simply manipulating ‘abstract ideas’ or ‘natural phenomena’ ... As the Supreme Court has made clear, ‘[a]n idea of itself is not patentable, ... taking several abstract ideas and manipulating them together adds nothing to the basic equation’. In re Warmerdam 31 USPQ2d at 1759 (emphasis added).

10. Since the Federal Circuit held in *Warmerdam* that this is the “dispositive issue” when it judged the usefulness, concreteness, and tangibility of the claim limitations in that case, Examiner in the present case views this holding as the dispositive issue for determining whether a claim is “useful, concrete, and tangible” in similar cases. Accordingly, the Examiner finds that Applicants manipulated a set of abstract “semantic network” to solve purely algorithmic problems in the abstract (i.e. what *kind* of “semantic network” is used? By definition, a semantic network is a labeled, directed graph with nodes representing physical or conceptual objects and labeled arcs representing relations between objects. What physical or conceptual objects are used in this case? Cars? House? Algebraic word problems? Boolean logic problems?) Clearly, a claim for manipulation of “semantic network” is provably even more abstract (and thereby less limited in practical application) than pure “mathematical algorithms” which the Supreme Court has held are per se nonstatutory – in fact, it *includes* the expression of nonstatutory mathematical algorithms.
11. Since the claims are not limited to exclude such abstractions, the broadest reasonable interpretation of the claim limitations includes such abstractions. Therefore, the claims are impermissibly abstract under 35 U.S.C. §101 doctrine.
12. Since *Warmerdam* is within the *Alappat-State Street Bank* line of cases, it takes the same view of “useful, concrete, and tangible” the Federal Circuit applied in *State Street Bank*. Therefore, under *State Street Bank*, this could not be a “useful, concrete and tangible result”. There is only manipulation of abstract ideas.

13. The Federal Circuit validated the use of *Warmerdam* in its more recent *AT&T Corp. v.*

Excel Communications, Inc. decision. The Court reminded us that:

Finally, the decision in *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) is not to the contrary. *** The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that ‘taking several abstract ideas and manipulating them together adds nothing to the basic equation’; hence, the court held that the claims were properly rejected under §101 ... Whether one agrees with the court’s conclusion on the facts, the holding of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under §101. (emphasis added) *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447, 1453 (Fed. Cir. 1999).

14. Remember that in *In re Warmerdam*, the Court said that this was the dispositive issue to be considered. In the *AT&T* decision cited above, the Court reaffirms that this is the issue for assessing the “useful, concrete, and tangible” nature of a set of claims under 101 doctrine. Accordingly, Examiner views the *Warmerdam* holding as the dispositive issue in this analogous case.
15. The fact that the invention is merely the manipulation of *abstract ideas* is clear. The data referred to by Applicants’ phrase “semantic network” is simply an abstract construct that does not limit the claims to the transformation of real world data (such as monetary data or heart rhythm data) by some disclosed process. Consequently, the necessary conclusion under *AT&T*, *State Street* and *Warmerdam*, is straightforward and clear. The claims take several abstract ideas (i.e., “value of neurons”) and manipulate them together adding nothing to the basic equation. Claims 1-20 are, thereby, rejected under 35 U.S.C. §101.

CLAIM REJECTIONS - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-20 are rejected under 35 U.S.C. §112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a §101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed *how* to practice the *undisclosed* practical application. This is how the MPEP puts it:

(“The how to use prong of section 112 **incorporates as a matter of law** the requirement of 35 U.S.C. §101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. §101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. §112.”); In re Kirk, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) (“Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, **otherwise an applicant would anomalously be required to teach how to use a useless invention.**”) See, MPEP 2107.01(IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-20 are rejected on this basis.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The following claims limitations are not supported by the specification:

- Claim 1 and claim 20: applicants recited:
 - A machine implemented semantic network without disclosing the structure of machine is being used.
 - “each semantic Janus units is capable of carrying out operations on at least one of itself or other semantic Janus units ... time-variable states” (claim 1), “an operation of Janus units is one of adding, changing, deleting ...” (claim 20). Applicants have not disclosed how these operations can be performed. Applicants only go so far as stating in the specification, on page 9, last paragraph “a semantic Janus unit constitutes a particular semantic unit having an algorithm or a collection of algorithms ...”. Examiner wonders what algorithm is being used? Genetic algorithm? Bubble sort algorithm? Heap sort algorithm? There exist numerous

algorithms for numerous purposes, and different input data will go into each algorithm.

- Claim 7: applicants recited “semantic Janus units furthermore possess evaluation criteria ... are treated”. Applicants repeated the description in the specification on page 14, lines 9-21 verbatim. The specification itself is ambiguous with no specific, detailed step or specific detailed calculation.
- Claim 12: applicants recited “time-variable state is shifted with the aid of a set of rules”. What set of rules is being referred to? Is it a rule-based system?
- Claim 16: applicants recited “semantic Janus units may within a virtual semantic network ... identity”. Applicants have neither disclosed how the virtual semantic network is created, nor the “reposition, recombine, newly generate, change, delete, replace, calculate expectations, make predictions” steps are done.
- Claim 17: applicants recited “capable of creating in itself, according to need ... network”. The claimed language is itself ambiguous and Examiner finds no help when reading the claims in light of the specification. Applicants only describe “with the aid of corresponding memory functions” with no further explanation i.e. what type of functions is used? How is it used?

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 4, 5, 6, 7, 9, 10, 14, 16, 17, 18, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- the use of the phrase “and/or” render the claims indefinite, since this phrase leads to more than one interpretations of the claimed limitations, In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970).

Due to the 35 U.S.C 112 rejections above, the claims have been treated on their merits as best understood by the examiner.

CLAIM REJECTIONS - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by "Semantic Networks and Associative Databases: Two Approaches to Knowledge Representation and Reasoning" by Eo-Pong Lim et al, hereafter Lim.

Regarding claim 1, Lim teaches

A machine-implemented semantic network comprised of a multiplicity of units, wherein said semantic network contains both semantic units possessing relational contents and also linking units describing a relational content which links two respective semantic units such

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that the mutual relation of the two linked semantic units is determined by the relational content (Figure 5 page 35),

at least some of said semantic units (rectangular nodes in Figure 5 page 35) are specific semantic Janus units (rectangular nodes such as has-taste in Figure 5 page 35) which are also linked with other semantic units through linking units (triangular nodes in Figure 5 page 35),

each semantic Janus units (rectangular nodes such as has-taste) is capable of carrying out operations on at least one of itself or other semantic Janus units, at least one of semantic units to which it is linked or those to which these are in turn directly or indirectly linked, or the linking units of the said semantic units (rectangular nodes such as Ham, Pea), and said semantic Janus units possess time-variable states,

said time-variable states determine what operations are to be carried out on at least one of what semantic units or linking units (page 34, rightmost column, lines 28-35), and

at least one of values of informational contents of at least one of said semantic units or linking units changed as a result of the operations of said semantic Janus units are set (rectangular nodes such as has-taste – depend on which taste i.e. salty or sweet then different wine will be ordered), at least one of new semantic units, linking units or partial networks are introduced or at least one of semantic units, linking units or partial networks within said semantic network are changed or deleted (page 34, middle column, last paragraph).

Regarding claim 2, Lim further teaches

A semantic network in accordance with claim 1, wherein the time-variable states of the semantic Janus units express a respective situation existing in said semantic network, in

dependence on which operating within said semantic network is carried out, wherein focusing on selected parts of said semantic network takes place (page 34, rightmost column, lines 28-35).

Regarding claim 3, Lim further teaches

A semantic network in accordance with claim 1, wherein said semantic Janus units have both a vicinity to be monitored, which is monitored by said semantic Janus units, and a vicinity to be shaped on which said semantic Janus units perform operations, and a respective new time-variable state of said semantic Janus units is determined from the existing time-variable state of said semantic Janus units and/or from an analysis of an optionally variable vicinity to be monitored (note the lines indicating the linkage of Janus unit in Figure 5 page 35 – a vicinity to be monitored is considered to be Find taste, and a vicinity to be shaped is considered to be Order wine).

Regarding claim 4, Lim further teaches

A semantic network in accordance with claim 3, wherein said vicinity to be monitored and/or said vicinity to be shaped are formed of a subset of a vicinity of semantic units to which a respective semantic Janus unit is linked, and/or of a subset of a vicinity of the very respective semantic Janus unit (note the lines indicating the linkage of Janus unit in Figure 5 page 35 – a vicinity to be monitored is considered to be Find taste, and a vicinity to be shaped is considered to be Order wine).

Regarding claim 5, Lim further teaches

A semantic network in accordance with claim 1, wherein said semantic Janus units, dependently on the existing time-variable state, only concentrate on superobjects located on a higher scale, subobjects located on a lower scale, and/or adjacent objects located on a same scale

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of said semantic units to which they are linked, and/or on said semantic Janus units themselves (page 33, middle column, lines 14-21).

Regarding claim 6, Lim further teaches

A semantic network in accordance with claim 5, wherein said linking units are also incorporated with said superobjects, subobjects and/or adjacent objects (Figure 5 page 35 – triangular nodes are linked throughout the network at different levels).

Regarding claims 7-19, these claims have the same defect as their base claims, hence are rejected for the same reason.

Regarding claim 20, Lim teaches:

A machine-implemented semantic network comprising a plurality of semantic units to contain relational contents, at least one semantic unit to be a semantic Janus unit (Figure 5 page 35, rectangular nodes such as has-taste in Figure 5 page 35); and

at least one linking unit to link two semantic units (triangular nodes in Figure 5 page 35); wherein

the at least one Janus unit has a time-variable state (page 34, rightmost column, lines 28-35);

the at least one Janus unit is to carry out operations on at least one of the Janus unit, a semantic unit and a linking unit, according to the time-variable state (page 34, rightmost column, lines 28-35).

RESPONSE TO ARGUMENT

Applicant argues:

1. **Rejection of claims 1-20 under 35 U.S.C. § 101**

Applicants' amendment that the claimed semantic network is implemented in a machine is not sufficient to overcome the rejection. First of all, the structure of the machine is not supported by the specification. Second, the mere fact that a hardware element is recited in the claim does not necessarily limit the claim to a specific machine or manufacture. What type of machine is being used? Is it a support vector machine? If so, it is not considered as being tangible or concrete. Therefore, the rejection stands.

2. **Rejection of claims 1-20 under 35 U.S.C. § 112, First Paragraph**

In response to applicants' argument that pages 24 and 25 of the specification, various practical applications of the invention are discussed. They are discussed but they are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Moreover, each of these practical applications discussed required different methods or different input data to be implemented i.e. management of on-line help for computer programs would only refer to computer data, while application in on-line monitoring of patients in the intensive care unit would require patients data.

3. **Rejection of claims 1-20 under 35 U.S.C. § 102(b)**

In response to applicant's argument, that Lim lacks such self-modification capabilities, also Lim is not concerned with the construction or modification of a network. Applicants have not disclosed how the self-modification is being done. As rejected above, applicants only stated an underlying algorithm without specification i.e what exact

algorithm is used? Therefore, examiner has full latitude to interpret each claim in the broadest reasonable sense.

CONCLUSION

To expedite the process of re-examination, the Examiner suggests that all future correspondences in regard to overcoming prior art rejections or other issues set forth by the Examiner, that applicants should provide and link to the most specific page and line numbers of the disclosure where the best support is found.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

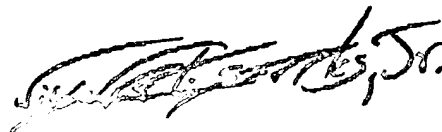
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

CORRESPONDENCE INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mai T. Tran whose telephone number is (571) 272-4238. The examiner can normally be reached on M-F 9:00am-- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent can be reached on (571) 272-3080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



M.T.T
Patent Examiner
Date: 12/22//2005

Wilbert L. Starks
Primary Examiner
Tech Center 2100